TABLE H.

Statement showing Lengths of Metre Gauge Railways sanctioned and open for Traffic on 31st March 1885.

Railways.	Length of line sanctioned.	Total length open on 31st March 1885	Length remaining to be finished.	Remarks.
Guaranteed Companies.				
South Indian	654½	654½	...	Rails weighing 68, 40¼ and 35½ lbs. per yard laid partly on wooden and partly on iron sleepers.
Assisted Companies.				
Southern Mahratta	718½	214	504½	Commenced as a famine relief work in April 1879, but from 1st October 1882 the system was made over to a company with a Government guarantee of 4 per cent up to 1st June 1887 and thereafter 3½ per cent on a capital of £ 3,000,000 and 3 per cent on all expenditure in excess of this sum.
Bengal and North-Western	505½	303	202½	Easy country and no Engineering difficulties. 41¼ lbs. steel rails on plate sleepers. Sanctioned as a productive public work on 18th May 1882. From 1st January 1883 line was handed over to a limited liability company with free gift of land but no guarantee. Government shares with Company profits over 6 per cent per annum.
Deoghur	5½	5½	...	Many curves, steep gradients and heavy work. Rails 36 lbs on wooden sleepers. Capital raised locally without any guarantee but with a free gift of land.
Assam Light Railway...	77½	77½	...	Rails 18 lbs per yard on existing Government road. Government has given 5 per cent guarantee for 20 years on a maximum capital of 16 lakhs of rupees.
Rohilkhand-Kumaun	54½	54½	...	Under a Government guarantee of 4 per cent on a maximum capital of 2 lakhs during construction or until January 1885.
West of India Portuguese	51	...	51	Under a guarantee given by the Portuguese Government in January 1881.
Pondicherry	7½	7½	...	Under a concession made by the French Government. Iron rails 40½ lbs. on wooden sleepers.
Total Assisted Companies.....	1,420½	662½	758	
State Imperial.				
Rajputana-Malwa	1,412	1,412	...	The Maharaja Holkar lent British Government 100 lakhs at 4½ per cent per annum with a moiety of surplus profits and the Maharaja Sindia lent 75 lakhs at 4 per cent per annum. Rails 36 and 40 lbs. per yard on deodar sleepers.
Bellary-Kistna	278	...	278	Sanctioned 26th September 1884 as famine protective line from Guntakal Station of the Madras Railway to Bezwada on the banks of Kistna.
Cuddapa-Nellore	83	...	83	Sanctioned 15th November 1883 as a protective work from Nellore to Tirupati.
Total State Imperial.....	1,773	1,412	361	
State Provincial.				
Northern Bengal	249	249	...	Rails 40 lbs. per yard on wooden and iron sleepers. Bridging heavy.
Assam-Behar	155½	...	155½	Rails 41¼ lbs. on sal sleepers.
Tirhoot	274	227	47	Rails 40 lbs. per yard on pine and iron sleepers.
Narayanganj Dacca-Mymensing	85½	10¼	75½	Ordinary metre gauge type.
Cawnpore-Achnera	254½	249	5½	Hattras-Muttra 29 miles: rails 30 lbs. on metalled road. Muttra-Achnera 24 miles: rails 41½ lbs. Commenced as famine relief work in 1878. Cawnpore-Furruckabad 197 miles: rails 40 lbs. per yard.
Bareilly-Pilibheet	36	36	...	Rails 41¼ lbs. per yard on wooden sleepers.
Lucknow-Sitapur Seramau	124	...	124	do easy country.
Nagpur-Chhattisgarh	149	149	...	Rails 40 lbs. per yard on wooden sleepers. Will be altered to broad gauge in connection with Railway from Sitarampur.
Burma	369	254	115	Rails 40 lbs per yard on wooden sleepers. Works are light, but bridging heavy.
Total State Provincial.....	1,696½	1,174½	522½	
Native States.				
Bhavnagar-Gondal	193	193	...	Rails 41¼ lbs. per yard on half round sleepers. Line constructed by Government under Committee of management from the revenues of Bhavnagar and Gondal States.
Jodhpore...	64	64	...	Light line, no fencing, no telegraph, Rails 36 lbs.
Mysore	173	140	33	Rails 41¼ lbs. per yard on wooden sleepers. Commenced as a famine relief work in 1877, and constructed from Mysore revenue. Bridging heavy, 68 arches over Cauvery river.
Total Native States.....	430	397	33	
SUMMARY.				
Guaranteed Lines	654½	654½	...	
Assisted Lines	1,420½	662½	758	
State ... Imperial	1,773	1,412	361	
State ... Provincial	1,696½	1,174½	522½	
Native States	430	397	33	
Total.....	5,974½	4,300	1,674½	

CAPITAL—TABLE B.

Total Expenditure on Metre Gauge Railways appropriated to the various undertakings to 31st December 1884.

Extracted from pages 42 and 43 of Director General of Railways' Administration Report.

	Railways.	Length of Railway open in Miles.	Total Expenditure including Suspense.	Classification of Expenditure.											Total Expenditure including Suspense.	Remarks.
				Preliminary Expenses.	Land.	Construction of Line.	Ballast and Permanent Way.	Stations and Buildings.	Steam Ferries.	Plant.	Rolling-Stock.	Establishment.	Suspense Accounts.	Receipts on Capital Accounts deducted.		
2	Rajputana-Malwa ...	1,120·14	8,49,77,106	18,80568	7,24,076	2,12,68,047	2,38,96,874	1,13,36,469	...	19,27,523	1,38,08,719	55,87,294	46,05,513	57,977	8,49,77,106	D. G. R. makes this total Rs. 9,77,28,200 page 60 and Rs. 10,86,02,224 page 77.
3	Northern Bengal	249·25	2,13,61,316	96,768	8,17,779	57,37,427	54,78,086	26,43,387	4,47,048	8,70,278	24,46,682	21,98,738	6,62,472	43,344	2,13,61,310	
4	Tirhoot	226·00	1,25,86,350	48,417	3,91,150	22,57,138	50,59,580	17,81,849	4,95,801	3,27,307	13,46,474	8,84,405	...	5,771	1,25,86,350	D. G. R. makes his total Rs. 1,48,64,982 pages 60 and 77.
5	Cawnpore-Achnera ...	239·78	1,06,06,521	70,498	2,18,604	21,11,403	41,10,194	10,18,962	...	2,94,546	16,46,612	5,81,092	5,55,481	871	1,06,06,521	D. G. R. makes this total Rs. 1,05,10,736 pages 60 and 77.
6	Nagpur-Chhahttisgarh ...	149·00	1,01,49,485	2,17,799	41,728	33,67,727	26,17,430	11,76,202	...	4,08,069	13,23,156	7,54,870	2,48,862	6,358	1,01,49,485	D. G. R. makes this total Rs. 1,01,55,843 pages 60 and 77.
7	Burma															
8	Bhavnagar-Gondal ...	193·21	92,92,040	51,338	....	31,73,619	27,75,192	9,77,260	...	3,41,508	12,04,000	5,03,995	2,72,756	7,628	92,92,040	
	Total for 6.....	2,177·38	14,89,72,818	23,65,388	21,93,337	3,79,15,361	4,39,37,356	1,89,34,129	9,42,849	41,69,231	2,17,75,643	1,05,10,389	63,51,084	1,21,949	14,89,72,818	
	Average on 6 for ...	1	68,418	1,086	1,008	17,414	20,179	8,695	433	1,915	10,001	4,827	2,916	56	68,418	
9	Mysore	139·75	62,64,620	1,24,697	57,676	16,26,484	23,17,789	5,08,139	...	1,33,676	7,42,926	4,42,352	3,20,255	9,374	62,64,620	
	Average in Mysore for ...	1	44,827	892	413	116,38	16,585	3,636	...	957	5,316	3,165	2,292	67	44,827	
	Percentage on Total ...	...	100	1·99	0·92	25·96	37·00	8·11	...	2·14	11·86	7·06	5·11	0·15	100	

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CAPITAL—TABLE C.

Expenditure appropriated up to 31st December 1884.

Railways.	Total cost per mile open including suspense.	Classification of Expenditure per mile.													Total cost per mile open including suspense.	Remarks.
		Preliminary Expenses.	Land.	Construction of Line.	Ballast and Permanent Way.	Stations and Buildings.	Steam Ferries.	Plant.	Rolling Stock.	Establishment.	Total Cost.	Deduct receipts on capital account.	Cost per mile.	Suspense per mile.		
	O.	A.	B.	C.	D.	E.	F.	G.	H.	J.	K.	L.	M.	N.	O.	
2 Rajputana-Malwa	75,863	1,678	646	18,987	21,334	10,121	...	1,721	12,328	4,988	71,803	52	71,751	4,112	75,863	D. G. R. makes this Rs. 83,135 page 60 and Rs. 73,240 page 77.
3 Northern Bengal	85,702	388	3,281	23,010	21,978	10,605	1,794	3,492	9,816	8,821	83,194	174	83,020	2,682	85,702	D. G. R. makes this Rs. 81,227 pages 60 and 77.
4 Tirhoot	55,692	214	1,731	9,988	22,388	7,885	2,194	1,448	5,958	3,912	55,718	26	55,692	...	55,692	D. G. R. makes this Rs. 60,463 pages 60 and 77.
5 Cawnpore-Achnera	44,234	294	912	8,805	17,142	4,250	...	1,228	6,867	2,423	41,921	4	41,917	2,317	44,234	D. G. R. makes this Rs. 41,518 pages 60 and 77.
6 Nagpur-Chhattisgarh	68,118	1,461	280	22,601	17,565	7,893	...	2,745	8,880	5,066	66,491	43	66,448	1,670	68,118	D. G. R. makes this Rs. 66,490 pages 60 and 77.
7 Burma	77,292	...	...	...	...	...	...	...	...	...	...	...	...	...	72,292	
8 Bhavnagar-Gondal	48,093	266	...	16,426	14,363	5,058	...	1,768	6,231	2,608	46,720	39	46,681	1,412	48,093	D. G. R. makes this Rs. 46,621 pages 60 and 77.
9 Mysore	44,827	892	413	11,638	16,585	3,636	...	957	5,316	3,165	42,602	67	42,535	2,292	44,827	D. G. R. makes this Rs. 42,536 pages 60 and 77.
Percentage on Total	100	1·99	0·92	25·96	37·00	8·11	...	2·14	11·86	7·06	95·04	0·15	94·89	5·11	100	

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TABLE D.

Statement showing the Number of Engines and Vehicles used in conveying Traffic and the Number of Miles travelled by Trains during the year ending 31st December 1884.

	Railways.	Miles open on 31st December 1884.	Number of Engines and Vehicles used in conveying Traffic.										Number of Train Miles run.				
				Carriages.													
			Engines.	First Class.	Second Class.	Third or Intermediate Class.	4th or Lowest Class.	Composite.	Total Number.	Miscellaneous Coaching Vehicles (excluding Brakes.)	Goods Vehicles of all description (excluding Brakes.)	Brake Vans.	Passenger.	Goods.	Mixed.	Total.	Number of Train Miles per Open Mile.
1	South Indian	654·00	122	33	33	...	320	19	405	35	1,584	94	715,393	947,987	852,264	1,663,380	2,513
2	Rajputana-Malwa	1,120·14	373	88	82	30	594	53	847	148	5,884	236	1,788,522	2,768,824	1,878,867	4,557,346	3,546
3	Northern Bengal	249·25	38	...	1	...	11	4	16	20	860	28	283,600	475,920	368,554	759,520	3,047
4	Tirhoot	226·00	34	15	6	6	50	4	81	19	507	20	200,860	254,381	287,459	455,241	2,262
5	Cawnpore-Achnera	239·78	35	6	3	...	125	8	142	2	517	14	210,609	160,720	318,413	371,329	1,823
6	Nagpur-Chhattisgarh	149·00	25	1	5	10	17	8	41	11	726	18	74,642	301,277	150,941	375,919	2,523
7	Burma	254·00	47	15	14	...	163	20	212	23	1,432	30	360,926	342,010	212,606	702,936	3,152
8	Bhavnagar-Gondal	193·21	20	13	8	74	...	6	101	10	(t)549	22	121,835	168,097	67,016	289,932	1,500
	Total.....	3,085·38	694	171	152	120	1,280	122	1,845	268	12,059	462	3,756,387	5,419,216	4,136,120	9,175,603	20,366
	Average for 3,085·38÷22·08 Miles...	139·75	31	8	7	5	58	6	84	12	546	11	170,126	245,436	187,323	415,562	922
9	Mysore	139·75	15	14	6	...	71	1	92	8	218	9	52,231	57,376	75,382	109,607	1,045

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Note,—6 N Class Engines and 19 Lowsided Wagons ordered in addition.
38 Covered Goods and 5 Highsides built in addition,
2 Third Class, 2 Powder Vans and 1 Carriage Truck under construction,

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REVENUE—TABLE E.

General Results of working of the principal Indian Railways, Metre Gauge, during the year ending 31st December 1884.

Headings.		Metre Gauge. South Indian. 1	Rajputana-Malwa. 2	Northern Bengal. 3	Tirhoot. 4	Cawnpore-Achnera. 5	Nagpur-Chhattisgarh. 6	Burma. 7	Bhavnagar-Gondal. 8	Total.	Average on Nos. 1 to 8.	Mysore. 9	Progressive Number.	
Miles open on 31st December 1884	Miles.	662	1,360·87	249·25	226	239·78	149	254	193·21	3334·11	139·75	139·75	1.	
Mean mileage worked during the year	"	662	1,285·15	245·83	201·25	203·68	149	222·98	193·21	3163·10	104·84	104·84	1 *a*.	
Total Capital Outlay ...	Rs.	4,54,96,187	10,86,02,224	2,13,61,316	1,48,64,982	1,05,10,736	1,01,55,848	2,08,61,290	92,92,039	24,56,44,617	-1,02,95,248	-62,64,620	2.	
" per mile open (*a*)...	"	66,214	-73,240	81,227	60,463	41,518	65,490	77,292	46,681	5,13,125	64,141	42,536	3.	Table C column M
Coaching receipts ...	"	22,47,308	43,79,904	6,72,319	4,86,449	4,57,691	2,08,935	12,52,281	4,90,090	1,01,94,977	3,37,917	2,26,275	4.	Table F.
Goods receipts ...	"	19,09,786	91,74,230	12,22,637	5,28,229	3,74,398	11,05,325	8,24,430	5,81,483	1,57,20,516	5,21,064	1,28,751	5.	Table G.
Gross earnings ...	"	42,01,745	1,87,59,747	21,66,769	11,90,072	8,60,699	13,23,014	21,05,421	10,92,312	2,66,99,779	8,84,977	3,61,448	6.	Table L.
Working expenses ...	"	26,96,558	78,32,414	15,15,255	9,23,491	5,95,356	7,64,984	12,83,486	5,94,841	1,62,06,385	5,37,168	1,95,969	7.	Do
Do per cent of gross receipts $\frac{7}{6} \times 100$	"	64·18	56·92	69·93	77·60	69·17	57·82	60·98	54·46	60·70	60·70	54·22	8.	Table M.
Net earnings ...	"	15,05,187	59,27,333	6,51,514	2,66,581	2,65,343	5,58,030	8,21,935	4,97,471	1,04,93,394	3,47,809	1,65,479	9.	Table L.
Do per cent on Capital Outlay $\frac{9}{2} \times 100$	"	3·28	5·46	3·05	1·79	2·52	5·49	3·94	5·35	4·27	4·27	2·64	10.	
Do do on paid up capital	"	3·28	...	...	...	...	...	...	5·51	...	...	...	11.	
Passenger train-miles ...	No.	715,393	1,788,522	283,600	200,860	210,609	74,642	360,926	121,835	3,756,387	1,24,507	52,231	12.	
Goods train-miles ...	...	947,987	2,768,824	475,920	254,381	160,720	301,277	342,010	168,097	5,419,216	1,79,623	57,376	13.	
Total train-miles ...	...	1,663,380	4,557,346	759,520	455,241	371,329	375,919	702,936	289,932	9,175,603	3,04,130	1,09,607	14.	
Coaching receipts per passenger train-mile, $\frac{4}{12}$	Rs.	3·14	2·45	2·37	2·42	2·17	2·80	3·47	4·02	22·84	2·71	4·33	15.	
Goods receipts per goods train mile $\frac{6}{13}$	"	2·02	3·31	2·57	2·08	2·33	3·67	2·41	3·46	21·85	2·90	2·24	16.	
Gross earnings per train mile $\frac{6}{14}$	"	2·53	3·04	2·85	2·61	2·32	3·52	3·00	3·77	23·62	2·91	3·30	17.	
Working expenses per train mile $\frac{7}{14}$	"	1·62	1·72	1·99	2·02	1·60	2·03	1·83	2·05	14·86	1·77	1·79	18.	
Net earnings per train mile $\frac{9}{14}$	"	0·91	1·30	0·86	0·59	0·72	1·49	1·17	1·72	8·76	1·14	1·51	19.	
Average number of passengers in a passenger train ...	...	279·96	191·80	147·38	159·16	194·59	233·31	210·05	274·13	1690·38	211·30	248·16	20.	
Average number of tons in a goods train ...	...	47·33	79·13	48·18	46·36	59·03	73·72	49·50	48·78	452·03	56·50	44·94	21.	
Average number of vehicles (excluding Brake-vans.)														
In each passenger train ...	...	12·60	12·42	13·84	12·94	17·00	0·13	15·36	19·64	102·93	12·99	12·43	22.	
In each goods train ...	...	14·53	19·69	29·48	27·48	22·00	18·30	25·31	32·56	189·35	23·67	7·41	23.	
In each mixed train... Passenger carriages	...	10·41	12·24	7·23	11·17	10·00	20·69	12·36	21·31	105·41	13·18	12·00	24.	
In each mixed train... Goods Vehicles	...	9·92	8·62	12·24	7·46	9·00	6·25	13·30	15·76	82·55	10·32	15·00		
Number of passengers carried one mile	...	200,283,751	343,041,497	41,791,897	31,968,535	40,982,751	17,414,573	75,811,775	33,398,879	784,693,658	26,009,071	12,961,520	25.	
Number of tons of goods carried one mile	...	44,867,318	219,093,784	22,929,103	11,793,787	9,487,350	22,211,222	16,929,351	8,199,883	355,511,888	11,783,622	2,578,201	26.	
Average cost of hauling per one mile.														
One passenger unit ...	Pies.	0·94	1·13	1·69	1·58	1·58	1·61	1·46	1·34	11·33	1·42	1·40	27.	
One ton of goods ...	"	6·27	4·76	7·45	6·66	5·20	6·32	8·52	8·00	53·48	6·68	9·04	28.	
Average sum received for carrying for one mile.														
One passenger unit ...	Pies.	2·06	2·16	2·72	2·54	2·14	2·10	3·07	2·51	19·30	2·41	3·11	29.	
One ton of goods ...	"	8·16	8·04	10·24	8·62	7·58	9·43	9·35	13·61	75·03	9·38	9·59	30.	

(*a*) Excluding steamer service and suspense accounts.

Average miles open $\frac{3,334·11}{23·86} = 139·75$. Average miles worked $\frac{3,163·10}{30·17} = 104·84$.

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REVENUE—TABLE F.

Statement showing the Passenger Traffic on Metre Gauge Railways during the year ending 31st December 1884.

	Railways.	Mean mileage worked during the year.	Passenger Traffic. First Class. Number.	First Class. Receipts.	Second Class. Number.	Second Class. Receipts.	Third or Intermediate. Number.	Third or Intermediate. Receipts.	Fourth or Lower. Number.	Fourth or Lower. Receipts.	Other Coaching Traffic.	Total. Number.	Total. Receipts.	Fares per Mile. 1st Class.	2nd Class.	Intermediate or 3rd Class.	4th or Lower Class.	
				Rs.		Rs.		Rs.		Rs.	Rs.		Rs.	Pies.	Pies.	Pies.	Pies.	
1	South Indian (c)	662·00	12,151	43,278	65,813	51,889	...	...	5,748,607	20,49,410	1,02,731	5,826,571	22,47,308	12	4	...	2·00	
2	Rajputana-Malwa (p)	1,285·15	15,261	1,36,358	45,469	1,51,740	90,812	1,05,045	5,619,841	34,74,191	5,12,570	5,771,383	43,79,904	18	9	3	2·67	Mail
3	Northern Bengal	245·83	4,700	43,178	9,937	43,612	21,250	38,303	833,525	4,62,733	79,493	869,412	6,72,319	18	9	4·50	2·00 2·50	Ordinary. * Do
4	Tirhoot	201·25	6,272	23,010	8,584	16,065	3,092	3,374	863,941	3,80,738	63,262	881,889	4,86,449	18	9	4·50	2·25 2·00	
5	Cawnpore-Achnera	203·68	1,654	4,878	5,271	7,335	4,777	2,701	1,474,000	4,22,042	20,735	1,485,702	4,57,691	15	8	3·00	2·50	
6	Nagpur-Chhattisgarh	149·00	2,681	4,415	10,842	5,487	13,834	4,938	702,880	1,75,796	18,299	730,237	2,08,935	18	8	4·00	2·00	
7	Burma	222·98	6,406	16,188	54,272	39,411	...	...	2,673,472	11,58,889	37,793	2,734,150	12,52,281	14·9	6	...	3·00	
8	Bhavnagar-Gondal	193·21	2,025	6,821	10,608	14,813	...	...	755,842	4,28,076	40,380	768,475	4,90,090	12	6	...	2·50	
	Total.....	3,163·10	51,150	2,83,126	210,796	3,30,352	133,765	1,54,361	18,672,108	85,51,875	8,75,263	19,067,819	1,01,94,977	125·7	59	19·00	18·67	
	Average of Nos. 1 to 8 for $\frac{3,163·10}{30·17}$	104·84	1,695	9,384	6,987	10,950	4,434	5,117	618,896	2,83,456	29,011	632,012	3,37,918	15·74	7·36	3·8	2·33	
9	Mysore	104·84	3,015	8,093	12,621	12,119	...	...	360,378	1,89,900	16,163	376,014	2,26,275	12	6	...	3	
	Percentage of Total.....	...	0·80	3·58	3·36	3·55	...	...	95·84	83·92	8·95	100	100	...	...	...	...	

(c) Includes the Pondicherry Branch (p) Includes Rawari-Ferozepore Railway. *2½ pies for passengers by Mail only—By mixed trains 2·25 pies for the 1st 100 miles and 2 pies for the next 100 miles.

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REVENUE—TABLE G.

Statement showing the Goods Traffic on the 9 Metre Gauge Railways during the year ending 31st December 1884.

	Railways	Mean mileage worked during the year.	Goods Traffic, General Merchandise.		Military Stores.		Railway Materials for Construction.		Coal for the Public and Construction.		Coal for Revenue only.		Revenue Stores other than Coal.		Live Stock.		Miscellaneous.	Total.	
			Tons.	Receipts.	Tons.	Receipts.	Tons.	Receipts.	Tons.	Receipts.	Tons.	Receipts.	Tons.	Receipts.	Tons.	Receipts.	Receipts.	Tons.	Receipts.
				Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.	Rs.		Rs.
1	South Indian ...	662·00	500,777	17,85,543	45	1,114	52,963	22,293	32	46	11,275	19,968	275,867	71,744	366	5,005	4,073	841,331	19,09,786
2	Rajputana-Malwa ...	1,285·15	762,369	80,73,760	2,063	32,620	149,861	5,62,898	6,007	32,078	75,062	2,67,095	94,259	1,88,294	98	3,364	14,132	1,089,719	91,74,230
3	Northern Bengal ...	245·83	160,688	10,94,430	308	4,137	53,773	43,859	7,177	29,490	8,201	27,442	8,615	21,153	...	5	2,121	238,763	12,22,637
4	Tirhoot	201·25	140,593	4,09,630	17	202	22,865	59,913	18,449	38,694	2,396	3,558	3,896	6,389	3	26	9,816	188,219	5,28,228
5	Cawnpore-Achnera ...	203·68	129,677	3,04,931	1,167	9,042	17,523	41,878	3,034	8,582	1,044	1,547	3,374	6,764	...	...	1,652	155,817	3,74,396
6	Nagpur-Chhattisgarh ...	149·00	199,575	10,62,415	418	645	2,643	3,508	323	630	6,253	14,911	89,248	19,285	2	79	3,852	298,563	11,05,325
7	Burma	222·98	205,339	6,99,200	336	1,074	34,555	76,747	36	40	473	190	18,885	12,059	733	10,405	24,706	260,407	8,24,430
8	Bhavnagar-Gondal ...	193·21	86,487	5,60,939	...	...	9,536	9,575	510	1,873	4,230	1,315	7,061	5,870	22	292	1,619	107,846	5,81,483
	Total.....	3,163·10	2,185,605	1,39,90,848	4,405	48,834	343,724	8,20,671	35,568	1,11,442	108,934	3,36,026	501,205	3,31,558	1,224	19,176	61,971	3,180,665	1,57,20,526
	Average of Nos 1 to 8 for 30·17	3,163·10 / 30·17 = 104·84	72,443	4,63,733	146	1,619	11,392	27,201	1,179	3,694	3,611	11,138	16,613	10,990	41	636	2,054	105,425	5,21,065
9	Mysore	104·84	35,919	1,00,170	2	81	1,808	20,933	...	...	...	...	3,373	5,938	16	196	1,483	41,118	1,28,751
	Percentage of Total	...	87·36	77·80	...	0·03	4·40	16·26	...	..	...	...	8·20	4·61	0·04	0·15	1·15	100	100

A. LEM.

REVENUE—TABLE H.

Table showing Ordinary Goods Rates on the Metre Gauge Railways on the 31st December 1884.

Names of Railways.	Goods Rates per Ton per Mile.							Remarks.
	Special Class.		1st Class.	2nd Class.	3rd Class.	4th Class.	5th Class.	
	Food Grain.	Coal.						
	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	Pies.	
1 South-Indian	...	...	(a)9·07	(b)13·61	...	...	(c)54·44	(a) For articles enumerated in the "Excepted list" of the Railway Company (not printed here). These articles when carried in Truck loads of 162 maunds. Are charged at 3 annas per mile and of 270 maunds at 5 annas per mile. (b) For all other goods, explosive articles excepted. (c) For combustibles.
2 Rajputana-Malwa	(o)	(p)	9·53	14·29	19·05	23·14	27·22	(o) 0·35 per maund for first 100 miles, 0·25 do from 101 to 200 do, 0·15 do 201 to 400 do, 0·10 over 400 miles — When in consignments of 270 maunds and over. Wheat is charged at Re. 0—7—2 from Delhi and 0—6—11 from Agra to Subarmati when booked to Bombay, and other grains, at 0—7—6 from Delhi and 0—7—3 from Agra to Subarmati. From 1st June 1883 from Stations Neemuch to Rutlam to Khandwa Rs. 0—4—4 is charged per maund.
3 Northern Bengal	(t)5·44 & 3·89 up; (t)6·80 & 4·54 down	(u)5·44 & 3·89	9·07	18·15	27·22	...	...	(p) Coal in consignments of 270 maunds is charged to the public as follows:— 0·35 per maund per mile for first 100 miles. 0·25 do from 101 to 200 miles. 0·15 per maund per mile from 201 to 400 miles. 0·10 do over 400 miles. Coal in full wagon loads for Revenue purposes of the Railway is carried at 0·15 pies per maund per mile. (t) Upwards 5·44 pies for first 100 miles, and 3·89 for next 100 miles, and downwards 6·80 pies for first 100 miles, and 4·54 for next 100 miles. (u) 5·44 pies for first 100 miles and 3·89 for next 100 miles.
4 Tirhoot	7·62	7·62	9·07	13·61	18·15	22·68	27·22	
5 Cawnpore-Achnera	4·89	7·62	9·07	13·61	18·15	22·68	27·22	
6 Nagpur and Chhattisgarh	(w) 9·5 & 9	6·00	10·00	14·00	24·00	34·00	48·00	(w) 9½ pies per ton per mile when booked for distances of 100 miles and less, 9 pies for distances above 100 miles.
7 Burma	7·80	7·80	12·26	15·32	21·45	...	...	
8 Bhavnagar-Gondal	7·00	8·00	10·88	16·33	21·77	27·22	32·66	
9 Mysore	(f) 6 & 7	(f) 8·00	(f) 10·00	(f) 13·61	(f) 18·00	(f) 24·00	(f) 36·00	(f) These rates are for a ton of 27 maunds.

A. LEM.

REVENUE

Statement showing the Quantities of the Principal Articles of Merchandise, &c.,

Metre Gauge

	Articles.	South Indian. 1		Rajputana-Malwa. 2		Northern Bengal. 3		Tirhoot. 4	
		Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.
		Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
1	Animals ...	5,150	5,008	781	3,304	...	...	...	...
2	Borax ...	...	...	...	...	...	...	...	...
3	Canes and rattans ...	...	...	649	5,229	...	...	...	...
4	Caoutchouc ...	...	...	...	...	...	...	...	...
5	Chinese and Japanese ware ...	...	...	...	...	...	...	...	...
6	Coal and coke ...	...	...	1,801	16,157	...	...	20,845	42,252
7	Cotton-raw ...	9,028	43,590	43,891	8,52,105	...	...	553	3,655
8	Cotton manufactured ...	11,204	1,53,795	20,769	5,48,994	5,750	60,990	5,867	38,220
9	Drugs and medicines ...	...	...	701	16,862	...	...	61	505
10	Dyeing materials ...	4,432	26,306	6,683	1,35,438	...	...	2,301	16,616
11	Earthenware and porcelain ...	41	169	...	...	...	...	...	...
12	Fibrous products ...	...	...	9,544	85,876	55,375	3,94,187	1,291	3,875
13	Fruits and nuts ...	17,856	1,01,596	13,918	1,75,357	...	...	180	951
14	Grain and pulse ...	181,002	3,81,025	180,712	14,56,647	28,452	69,060	39,576	82,932
15	Gums and resins ...	...	...	987	16,036	...	...	...	...
16	Hides and skins ...	5,030	44,798	3,799	64,757	...	...	3,568	11,877
17	Horns ...	...	...	225	4,486	...	...	5	23
18	Lac ...	...	...	347	4,325	...	...	361	971
19	Leather ...	...	...	650	9,690	...	...	3	15
20	Liquors ...	1,953	18,057	1,118	27,298	...	...	287	1,976
21	Mats ...	396	4,745	...	...	...	...	...	...
22	Metals and Manufactures ...	8,021	55,619	24,445	4,18,051	3,446	33,555	3,606	17,005
23	Oils ...	7,689	41,291	3,649	69,830	1,146	8,895	756	3,121
24	Opium ...	...	...	2,284	53,192	...	...	...	...
25	Paints and colors ...	...	...	327	7,875	...	...	37	240
26	Provisions ...	17,268	99,369	5,430	1,23,092	...	...	960	4,312
27	Salt ...	43,079	1,27,880	170,921	13,37,131	22,121	68,656	21,748	56,570
28	Saltpetre, &c. ...	...	...	4,717	51,994	...	...	9,748	27,746
29	Seeds ...	57,739	1,69,129	126,131	11,41,144	4,754	14,735	24,644	61,241
30	Silk ...	...	...	26	865	...	...	...	...
31	Spices ...	849	6,304	1,483	25,728	...	...	911	4,094
32	Stone and marble ...	96,710	1,13,772	13,398	68,379	...	...	226	650
33	Sugar ...	33,857	1,38,980	69,461	7,10,254	1,170	4,355	1,478	4,899
34	Tea ...	4	43	464	12,763	6,776	1,54,686	...	...
35	Tobacco ...	2,743	22,235	10,514	2,01,894	12,539	93,108	5,097	14,292
36	Wood ...	12,807	37,973	22,259	1,10,146	...	...	6,581	13,993
37	Wool ...	...	...	2,946	71,718	...	...	49	350
38	All other articles of merchandise ...	30,118	1,94,780	19,927	2,60,767	97,233	2,88,084	35,483	1,02,165
39	Bark (tanning) ...	...	...	...	...	...	...	...	...
40	Coffee ...	...	...	...	...	...	...	...	...
41	Government stores ...	...	...	2,063	32,020	...	...	17	203
42	Manures ...	...	...	...	...	...	...	...	...
43	Vegetables ...	...	...	...	...	...	...	88	231
44	Chunam and lime ...	...	...	...	...	...	...	1,889	3,406
45	Hay and straw and grass, &c. ...	...	...	...	...	...	...	...	...
46	Railway materials ...	...	...	154,067	5,78,809	...	...	...	...
47	Revenue stores ...	...	...	169,321	4,55,388	...	...	...	...
48	Miscellaneous ...	...	...	...	...	...	...	...	...
	Total...	505,971	17,91,662	1,090,402	91,50,201	233,762	12,20,511	188,218	5,18,316

—TABLE J.

carried and the receipts therefrom on Metre Gauge Railways for 1884.

Railways.

Cawnpore-Achnera. 5		Nagpur-Chhattisgarh. 6		Burma. 7		Bhavnagar-Gondal. 8		Total.		Average of 8 Railways for $\frac{3163 \cdot 10}{30 \cdot 17}$		Mysore. 9		
Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	Quantity.	Receipts.	
Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.	
...	...	5	64	5,530	10,405	...	292	11,466	19,131	380	634	55	195	1
52	142	1	5	...	...	1	8	54	155	2	5	...	...	2
3	11	...	3	56	260	...	...	702	5,503	23	182	...	2	3
47	84	...	...	...		...	...	47	84	2	3	...	...	4
...	1	...	...	13	105	10	155	23	261	1	9	...	...	5
3,866	10,004	6,576	15,540	509	283	4,730	3,188	38,327	87,379	1,270	2,896	...	...	6
2,338	13,976	256	2,932	14	153	35,884	2,89,466	91,964	12,10,877	3,048	40,135	12	38	7
3,080	16,543	2,568	21,922	1,251	9,305	1,292	12,454	51,781	8,62,223	1,716	28,579	1,106	6,931	8
217	656	131	1,301	110	1,073	9,067	884	10,287	21,281	341	705	48	340	9
3,415	10,495	3,043	19,498	7,214	33,038	486	3,933	27,574	2,45,324	914	8,131	170	679	10
109	607	5	47	521	4,808	2	26	678	5,155	22	171	18	60	11
1,221	2,856	2,314	15,103	1,714	10,497	1,387	8,135	72,846	5,20,529	2,414	17,253	...	...	12
577	2,341	1,106	6,603	3,551	25,277	1,796	11,570	38,984	3,23,695	1,292	10,729	1,602	6,771	13
33,662	64,065	119,475	5,87,444	122,381	3,86,563	17,854	72,225	673,064	31,29,961	22,309	1,03,744	7,468	16,207	14
545	964	437	2,500	22	144	40	393	2,031	20,037	67	664	16	96	15
525	2,769	1,211	7,453	261	2,359	230	1,922	14,624	1,35,935	485	4,506	813	2,861	16
10	45	214	1,406	14	153	10	96	478	6,209	16	206	...	...	17
98	365	332	2,635	4	46	8	85	1,150	8,427	38	279	6	23	18
71	307	212	477	45	427	...	...	981	10,916	32	362	98	268	19
361	1,164	119	875	372	4,297	24	275	4,234	53,882	140	1,786	254	1,663	20
1	8	47	212	95	653	...	...	539	5,618	18	186	145	220	21
5,103	22,788	1,367	7,538	1,584	10,191	1,770	14,120	49,357	5,78,867	1,636	19,187	1,171	5,168	22
321	1,367	194	981	2,249	17,953	1,310	9,136	17,314	1,52,574	574	5,057	299	1,456	23
260	2,626	15	429	...	45	7	139	2,566	56,431	85	1,870	...	...	24
9	39	52	346	12	77	53	582	490	9,189	16	905	...	...	25
2,329	5,991	275	1,269	3,781	27,006	492	3,493	30,535	2,64,532	1,012	8,768	...	...	26
33,023	65,603	14,776	72,184	1,706	6,659	2,142	4,744	309,516	17,39,427	10,259	57,654	2,036	5,221	27
4,787	12,949	3	26	...	...	16	129	19,271	92,844	639	3,077	...	...	28
16,930	30,047	42,263	2,54,943	3,804	17,950	4,941	23,262	281,206	17,12,451	9,321	56,760	3,864	9,805	29
11	73	5	64	45	492	2	32	89	1,526	3	51	32	150	30
854	2,246	204	1,397	368	3,213	128	944	4,797	44,126	159	1,463	52	243	31
1,697	4,389	15	129	24,542	39,103	1,527	2,802	138,115	2,29,224	4,578	7,598	1,591	2,305	32
8,035	9,760	615	3,627	2,007	10,229	1,824	10,499	118,447	8,92,603	3,926	29,586	570	2,146	33
3	17	2	17	43	322	4	50	7,296	1,74,098	242	5,771	...	...	34
606	3,161	234	945	929	6,718	494	3,091	33,156	3,45,444	1,099	11,450	221	601	35
3,103	9,387	3,430	22,906	18,789	38,437	10,751	66,951	77,720	2,99,793	2,576	9,937	3,454	2,972	36
1,556	4,151	28	194	55	522	164	1,667	4,793	78,602	159	2,605	64	307	37
3,232	9,146	4,726	25,006	3,575	19,046	1,744	17,721	205,033	9,16,715	6,796	30,384	9,412	27,866	38
...	...	...	...	38	201	...	...	138	201	5	7	...	...	39
...	...	...	...	5	24	...	...	5	24	...	1	643	2,713	40
1,166	9,042	92,310	23,437	886	1,074	...	...	95,942	66,376	3,180	2,200	2	30	41
...	...	...	...	86	418	...	...	86	418	3	14	34	69	42
865	2,583	...	...	2,444	17,628	...	...	3,397	20,442	113	678	717	2,991	43
613	1,209	...	...	1,078	3,813	...	...	3,480	8,428	115	279	...	...	44
...	...	...	...	599	497	...	...	599	497	20	16	...	...	45
17,522	41,847	...	...	53,441	88,807	...	...	225,030	7,09,463	7,459	23,515	1,808	20,933	46
3,587	6,920	...	...	...	...	...	...	172,908	4,62,308	5,731	15,323	3,374	5,940	47
...	...	...	...	...	...	...	...	...	...	...	...	...	...	48
155,815	3,72,744	298,561	11,01,458	265,203	7,99,724	100,190	5,64,419	2,843,030	1,55,29,105	94,233	5,14,720	41,155	1,27,270	

A. LEM.

REVENUE—TABLE K.

Statement showing the Unit Mileage of Passengers and Goods carried on the 9 Metre Gauge Railways during the year ending 31st December 1884.

	Railways.	Mean mileage worked during the year.	Passengers Traffic. Number of passenger miles (expressed in the number of passengers carried one Mile.) First Class.	Second Class.	Third or Intermediate Class.	Fourth or Lowest Class.	Total.	Other Coaching Traffic Ton-miles.	Goods Traffic. Number of Ton-miles (expressed in the number of Tons moved one Mile.) General Merchandise.	Military Stores.	Railway Materials for Construction	Coal for the Public and Construction	Coal for Revenue only.	Revenue Stores other than Coal.	Live Stock.	Total.
1	South Indian	662·00	729,560	2,783,015	...	196,766,176	200,283,751	357,054	39,862,738	10,266	1,092,589	2,197	969,407	2,896,745	33,376	44,867,318
2	Rajputana-Malwa ...	1,285·15	1,812,980	5,970,161	6,722,875	328,535,481	343,041,497	3,216,894	183,938,053	329,935	15,620,262	931,594	12,434,301	5,823,289	16,350	219,093,784
3	Northern Bengal	245·83	635,884	1,275,655	1,923,650	37,956,708	41,791,897	311,114	18,939,527	54,723	1,348,694	924,722	1,013,691	648,427	9	22,929,193
4	Tirhoot...	201·25	282,631	423,911	154,817	31,102,176	31,968,535	329,330	8,785,443	1,786	1,605,504	1,035,519	100,093	175,267	175	11,793,787
5	Cawnpore-Achnera	203·68	64,024	220,850	172,787	40,516,090	40,982,751	91,975	7,503,879	94,081	1,278,774	292,674	82,733	235,809	...	9,487,350
6	Nagpur-Chhattisgarh ...	149·00	56,438	180,526	259,018	16,918,591	17,414,573	64,815	20,657,041	6,981	89,189	22,142	566,534	869,072	2633	22,211,222
7	Burma	222·98	215,006	1,399,998	...	74,196,771	75,811,775	135,627	14,489,050	5,448	1,796,536	1,127	5,416	416,497	215,276	16,929,350
8	Bhavnagar-Gondal	193·21	97,570	424,923	...	32,876,386	33,398,879	199	7,287,703	...	438,275	51,085	54,004	366,809	2,022	8,199,883
	Total	3,163·10	3,894,093	12,698,039	9,233,147	758,868,379	784,693,658	4,507,908	301,463,439	503,220	23,859,823	3,260,440	15,225,579	11,431,915	267,471	355,511,887
	Average of Nos. 1 to 8 for 3163·10 ÷ 30·17...	104·84	129,072	420,883	306,037	25,153,078	26,009,070	149,417	9,992,159	16,679	774,273	108,069	504,659	378,917	8,866	11,783,622
9	Mysore...	104·84	154,976	499,941	...	12,306,603	12,961,520	53,712	2,043,522	172	280,681	...	...	247,009	814	2,578,201
	Percentage of Total.....	...	1·20	3·86	...	94·94	100	...	79·26	...	11·12	...	...	9·58	0·04	100

A. LEM.

REVENUE—TABLE L.

Statement showing the Total Receipts and Expenses and Net Receipts per Train Mile on the 9 Metre Gauge Railways during the year ending 31st December 1884.

Railways.	Mean mileage worked during the year.	Coaching Receipts.		Goods Receipts.		Total Traffic Receipts.		Miscellaneous (including Steam Boat Receipts.)		Gross Receipts.		Working Expenses.		Net Receipts.	
		Rupees.	Per Passenger Train Mile.	Rupees.	Per Goods Train Mile.	Rupees.	Per Train Mile.	Rupees.	Per Train Mile.	Rupees.	Per Train Mile.	Rupees.	Per Train Mile.	Rupees.	Per Train Mile.
h Indian	662·00	22,47,308	3·14	19,09,786	2·02	41,57,094	2·50	44,651	0·03	42,01,745	2·53	26,96,558	1·62	15,05,187	0·91
utana-Malwa	1285·15	43,79,904	2·45	91,74,230	3·31	1,35,54,134	2·97	2,05,613	0·05	1,37,59,747	3·02	78,32,414	1·72	59,27,333	1·30
thern Bengal	245·83	6,72,319	2·37	12,22,637	2·57	18,94,956	2·49	2,71,813	0·36	21,66,769	2·85	15,15,255	1·99	6,51,514	0·86
oct	201·25	4,86,449	2·42	5,28,228	2·08	10,14,677	2·23	1,75,395	0·39	11,90,072	2·61	9,23,491	2·02	2,66,581	0·59
ipore-Achnera	203·68	4,57,691	2·17	3,74,396	2·33	8,32,087	2·24	28,612	0·08	8,60,699	2·32	5,95,356	1·60	2,65,343	0·72
pur-Chhattisgarh ...	149·00	2,08,935	2·80	11,05,325	3·67	13,14,260	3·50	8,754	0·02	13,23,014	3·52	7,64,984	2·04	5,58,030	1·48
na	229·98	12,52,281	3·47	8,24,430	2·41	20,76,711	2·95	28,710	0·04	21,05,421	3·00	12,83,486	1·83	8,21,935	1·17
vnagar-Gondal	193·21	4,90,090	4·02	5,81,483	3·46	10,71,573	3·70	20,739	0·07	10,92,312	3·77	5,94,841	2·05	4,97,471	1·72
Total...	3163·10	1,01,94,977	2·71	1,57,20,515	2·90	2,59,15,492	2·82	7,84,287	0·09	2,66,99,779	2·91	1,62,06,385	1·77	1,04,93,394	1·14
rage of Nos. 1 to 8 for 3163·10÷30·17	104·84	3,37,918	2·71	5,21,064	2·90	8,58,982	2·82	25,996	0·09	8,84,978	2·91	5,37,169	1·77	3,47,809	1·14
ore...	104·84	2,26,275	4·33	1,28,751	2·24	3,55,026	3·24	6,422	0·06	3,61,448	3·30	1,95,969	1·79	1,65,479	1·51
Percentage of Total.....	...	62·60	...	35·62	...	98·22	...	1·78	...	100·00	...	54·22	...	45·78	...

A. LEM.

Average Train Miles 304,130. Mysore Train Miles 109,607.

REVENUE—TABLE M.

Table showing Expenditure on Revenue Account on 9 Metre Gauge Railways during the year ending 31st December 1884.

Railways.	Mean mileage worked during the year.	Maintenance of Way, Works and Stations.			Locomotive.			Carriage and Wagon.			Traffic.			General.			Steam Boat.			Special & Miscellaneous.			Total.		
		Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.	Amount.	Per Train Mile.	Per cent of Gross Receipts.
...dian (b) ...	662·00	6,49,239	0·39	15·45	8,90,703	0·54	21·20	3,11,480	0·19	7·41	3,74,163	0·22	8·91	4,55,510	0·27	10·84	...	...	...	15,463	0·01	0·37	26,96,558	1·62	64·18
...a-Malwa (i) ...	1285·15	18,66,488	0·41	13·56	34,36,659	0·75	24·98	5,81,370	0·13	4·22	11,29,410	0·25	8·21	7,19,204	0·16	5·23	...	...	...	99,283	0·02	0·72	78,32,414	1·72	56·92
... Bengal ...	245·83	5,90,422	0·78	27·25	3,52,005	0·46	16·25	65,330	0·09	3·01	1,83,674	0·24	8·48	1,56,119	0·20	7·20	1,52,542	0·20	7·04	15,163	0·02	0·70	15,15,255	1·99	69·93
... ...	201·25	2,33,892	0·51	19·65	1,96,623	0·43	16·52	65,866	0·14	5·54	1,32,041	0·29	11·10	1,32,564	0·29	11·14	1,27,614	0·28	10·72	34,891	0·08	2·93	9,23,491	2·02	77·60
...e Achencra ...	203·68	1,31,155	0·35	15·24	2,00,049	0·54	23·24	52,304	0·14	6·08	1,13,616	0·31	13·20	89,510	0·24	10·40	...	...	...	8,722	0·02	1·01	5,95,356	1·60	69·17
...Chhattisgarh ...	149·00	2,39,610	0·64	18·11	2,45,512	0·65	18·57	59,191	0·16	4·47	1,16,215	0·31	8·78	89,626	0·24	6·77	...	...	...	14,830	0·03	1·12	7,64,984	2·03	57·82
... ...	222·98	3,73,596	0·53	17·74	3,77,137	0·54	17·92	89,665	0·13	4·26	2,94,807	0·42	14·00	1,34,331	0·19	6·38	...	...	...	13,900	0·02	0·66	12,83,486	1·83	60·96
...ar-Gondal ...	193·21	1,36,441	0·47	12·49	1,56,663	0·54	14·34	32,190	0·11	2·95	1,20,316	0·42	11·02	1,34,808	0·46	12·34	...	...	...	14,423	0·05	1·32	5,94,841	2·05	54·46
Total.....	3163·10	42,20,343	0·46	15·81	58,55,401	0·64	21·93	12,57,396	0·14	4·71	24,64,242	0·27	9·23	19,11,672	0·21	7·16	2,80,156	0·03	1·05	2,16,675	0·02	0·81	1,62,06,385	1·77	60·70
of Nos. 1 to 8, for 3163·10 ÷ 30·17	104·84	1,39,902	0·46	15·81	1,94,080	0·64	21·93	41,677	0·14	4·71	81,679	0·27	9·23	63,363	0·21	7·16	9,286	0·03	1·05	7,182	0·02	0·81	5,37,169	1·77	60·70
... ...	104·84	49,795	0·45	13·78	69,110	0·63	19·12	13,638	0·12	3·77	24,897	0·23	6·89	34,651	0·32	9·59	...	...	...	3,878	0·04	1·07	1,95,969	1·79	54·22
...centage of Total.....	...	25·41	...	...	35·27	...	...	6·96	...	...	12·70	...	...	17·68	...	...	...	...	...	1·98	...	...	100 00	...	...

A. LEM.

(b) Includes Pondicherry Railway working expenses.
(i) Includes Rewari-Ferozepore.

Total Train Miles ... 9,175,603

Average Train Miles ... $\frac{9,175,603}{30·17}$ = 304,130

Total Gross Receipts... 2,66,99,779

Average do ... $\frac{2,66,99,779}{30·17}$ = 8,84,979 Rs.

The following correspondence relating to the White Silk Cotton tree (*Eriodendron anfractuosum*) commonly known as Biliburgadamara in Canarese, is published for general information.

No. 465-78—9, DATED BANGALORE, 21ST APRIL 1884.

ORDER THEREON.—Copies of Mr. Cameron's letter and enclosure thereto are forwarded to the Deputy Commissioners, Sub-Division Officers and the Forest Officers with a request that, after careful enquiry, a report may be forwarded showing in what Taluks the trees are now to be found, and where their growth is most luxurious, and what encouragement would be necessary to extend its cultivation. They are also requested to collect a quantity of the cotton and to forward it to Mr. Cameron, in order to enable him to make a trial consignment to Europe.

Abstract of replies to the above, received from District Officers.

In the Bangalore District the tree is found in betel-leaf gardens, but rarely on dry crop lands except in the Hoskote and Dodballapur Taluks. It is planted not for its cotton, but to protect the betel-leaf creepers. The Deputy Commissioner suggests that it may be sown in some of the fuel plantations and if successful there, the ryots might be induced to cultivate it on Government waste lands given them on easy terms. Another specimen is found in the jungles of the Kankanhalli Taluk, but it does not yield good cotton.

It is not found to any considerable extent in the Kolar District, nor do the people know how to utilize it to the best advantage. It is sparsely grown in some gardens for supporting betel-leaf creepers, the leaves and branches being often cut away for the safety of the creepers, and in consequence the tree seldom bears. The cotton is not collected, partly because there is no demand for it and partly because the out-turn is insignificant.

In the Tumkur District it is found to a small extent in almost all the Taluks, being grown in betel gardens as a support to the creepers. It is not found however in the forests of this District. As it has a flourishing growth in moist places where the soil is red, mixed with clay, the Deputy Commissioner suggests its being tried as an experimental measure in the Devarayadurga, and Maddagiri forests, and to encourage private individuals to grow it by Government offering to purchase all the cotton they can supply at a fixed price for 2 or 3 years. The ryots however do not yet know of its commercial value. The pods are usually collected in February and March, and if not done so, then they burst and the cotton is blown away by the wind.

In the Mysore District the tree is grown to a very small extent in some Taluks, and the ryots not being aware of the value of the seeds and of the cotton the fruit produces, pay little or no attention to its cultivation. In some places the fruit is allowed to dry and burst when the cotton is blown away by the wind. The tree is supposed to grow only on rich soil which contains moisture and which is fitted for garden cultivation. If the quantity of seed, the mode of cultivation, and the probable value of the crop which a given area of land can produce, be explained to the ryots and the seed supplied, the Deputy Commissioner thinks they may be induced to try the experiment on a portion of their lands, on condition of Government purchasing the out-turn at a fixed price for a couple of years.

The tree grows in the Mudgere, Koppa, Chikmagalur and Tarikere Taluks of the Kadur District, but to a very slight extent. No attempt has been hitherto made to cultivate it. It is difficult and expensive to collect the cotton owing to the great height to which the tree grows. The jungle fires which occur at the season when the pods ripen,

moreover, damage the cotton by blackening it. The Deputy Commissioner after a conversation with Mr. Dickinson, the Deputy Conservator of Forests in Coorg, is inclined to think that the forests below the ghats in the hotter and damper climate of South Canara is more favorable to the growth of this tree than the climate of the Mysore Coffee District, where it is met with only singly, but in South Canara in clumps.

It does not grow luxuriantly in any part of the French Rocks Sub-Division, and is occasionally planted in betel-leaf gardens to train the creeper on. The Sub-Division Officer thinks that if the ryots understand the value of kapok as a profitable article of commerce, they would plant it extensively, and he supports a proposal made by the Attikuppa Amildar that Government insist on ryots planting their village topes with kapok as an experiment.

The Chitaldroog Sub-Division Officer reports that a few trees are grown in betel-leaf gardens as supports for the creepers and for shade. The tree seems to require constant moisture and the dry climate of Chitaldroog does not seem favorable to its growth. The cotton is not sold as it has no market value. The fruit is allowed to drop off the tree and rot.

From the Assistant Conservator of Forests, Shimoga, To the Deputy Commissioner, Shimoga District, No. 171, dated Camp Chikmagalur, 27th July 1884.

With reference to your docket No. 155 of 10th May last, enclosing Dewan's Proceedings No. 465-78—9, dated 21st April 1884, I have the honor to submit the following report on the silk cotton tree (*Eriodendron anfractuosum.*)

As the tree fruits in the dry months of February, March or April, I was unable to make any collection of the cotton, and the Amildars, for similar reasons, have been unable to carry out your orders to make a collection.

The tree is found growing in small numbers in all the Taluks of the District, but is by no means plentiful in any one locality. It is not only indigenous to the forests, but is cultivated by the ryots in betel-nut gardens owing to its fast growth, to serve as a support for this vine, which entwines itself around the tree in its growth. In such cases, it is planted by means of stakes, as these "take" sooner than seed, from 4 to 6 feet apart, and as soon as it has answered its purpose, after a few years, it is cut down and removed with the decay of the betel.

The tree itself can be very easily cultivated and requires to be watered for one hot season only, after which the usual rains are sufficient to promote its growth.

In the forests the tree grows scattered here and there, and attains a good size, averaging from 4 to 8 feet in girth and from 10 to 20 or 30 feet in height; but the cotton is not collected for sale or any special purpose, and the pods have been often observed by me rotting on the ground in heaps under each tree. In some few cases the ryots collect some for stuffing.

The question whether it would pay to collect the cotton and despatch it to Bangalore from such a distance has to be settled. In any case, the tree is not plentiful enough in the forests to make it worthwhile attempting such a step at present, but if plantations are formed for this special purpose and the Railway is opened out as far as Shimoga, I have no doubt a small profit may be made from the artificial cultivation of the tree. The question of its paying or not even on a small scale can be best settled in the Bangalore District; and if the Superintendent of Government Gardens, Bangalore, makes a further report on the result of his trial consignment to Europe and on the utility of its cultivation on a large scale, the matter can be taken up in this remote western division of the Province.

I have observed that the tree is allowed to be cut down by a certain class of people commonly known as "Dombars" (Mutchi men), who use the wood for making toys and other articles, such as "kaibatlu" (hand trays); "konabi," &c. This should be put a stop to; and a circular issued to the Amildars to that effect. If the wood of this tree is much in demand by these men, they are at liberty to give a darkhast for the same; and the Forest Department may collect some of the older trees to the

depôts from which the timber may be sold by retail. It is a fact that the wood is soft and worthless for any other purpose, but the value of the produce (cotton) obtained from it requires some consideration. The "Dombars" of course have been accustomed to appropriate this wood free of charge from a long time, and would now consider it a hardship to be deprived of this privilege; but I have observed very large numbers of these trees cut down without any consideration wherever this class of people take up their abode, which is usually near the forests of remote villages; and I think it necessary that some restrictions should be placed on the wasteful cutting of this tree.

As regards the encouragement necessary to extend its cultivation, this is a difficult matter; but if the sale of the cotton is profitable at Bangalore, then the promise of the payment of a fixed price per maund from the profits to the cultivator may perhaps induce some ryots to cultivate the tree for the express purpose of the sale of its cotton.

A reward may also be offered in the first instance for each plantation of not less than 5 acres with the trees planted about 18 feet apart, the land for the same being granted free by Government.

Memorandum on the Silk Cotton trees of Mysore by Mr. Graham Anderson, South Mysore Planters' Association.

As the trees indigenous to Mysore have engaged a large share of my attention for many years past, I have perused with much interest Proceedings No. 465-78—9, dated 21st April 1884.

The Superintendent of Government Gardens in Bangalore deserves the thanks of the Agricultural Community for the attention which he has drawn to the subject of silk cotton, and it is earnestly to be hoped that in the future he will further assist by making public any information of a similar nature regarding other products which may appear to him worthy of introduction or cultivation, it being impossible to overestimate the benefits which the department over which he presides is capable of bestowing on the Province generally. As I have personally no pretensions to technical knowledge, I am not at all sure that I have correctly identified the kapok tree, but I most diffidently venture to make a few remarks on the silk cotton producing trees of Mysore, and to refer specially to one which in my humble opinion most closely answers to the description so obligingly afforded.

Among the varieties of the order *Sterculiaceæ* to be found in our Malnad I failed entirely to recognize the *Eriodendron anfractuosum*, and have consequently made some careful inquiries about it.

My remarks, I trust, may be of some service even if they only lead to prove that more yet remains to be learnt regarding the tree, both as to its identity and the possibility of extending its cultivation.

Bentley divides the order *Sterculiaceæ* into three tribes :—
Bombaceæ.—Examples; *Adansonia, Eriodendron, Bombax, Cheirostemon, Durio, Ochroma, &c.*
Helicteræ.—Examples; *Matisia, Helecteres, &c.*
Sterculieæ.—Examples; *Sterculia, Heritiera, &c.*
Lindley enumerates 37 genera and 128 species as belonging to this order. (Bentley).
The plants of interest are referred to as follows :—

Chorisia speciosa.—has its seeds covered with silky hairs which are used for stuffing cushions, &c. It is termed vegetable silk.

Eriodendron Samanna.—South America; remarkable for its great height. The hairy covering of the seeds of various species of *Eriodendron* is employed for stuffing cushions, &c.

Bombax Ceiba.—The silk cotton tree of South America.

Bombax Pentandrum.—The silk cotton tree of India. The seeds of these are covered with long silky hairs. These hairs cannot be used like those of ordinary cotton for manufacturing purposes, chiefly on account of the smoothness and want of adhesion between their sides. (Bentley.)

(3672). The wool of several species of *Eriodendron* and *Chorisia* is used for stuffing beds and cushions, and that of *Ochroma lagopus* substituted for beaver. (Page 819. Outlines printed by I. and C. Adlard).

In the Malnad the varieties of *Bombax* are as follows :—

Mul Buraga. (Canarese) (*Bombax heptaphyllum* or *pentandrum* (?)) a large, very thorny deciduous tree with a red flower. Yields very inferior silk cotton which cannot be twisted into a thread, the fibre being very brittle ; grows in the Malnad Forests.

Buraga, Biliburaga. Canarese.

A somewhat smaller, deciduous tree with a white flower. Hardly any thorns at all. Yields a somewhat better cotton which can only be used for stuffing purposes. Grows on the edge of the open country to the east, but is very rarely found in the Malnad. The bark is said to be used by the natives for intestinal disorders of cattle.

The cotton escapes from the pod about February, March and is very difficult to collect owing to the strong east wind which then prevails. The thorns of the *Mul Buraga* offer an insuperable difficulty to gathering of produce.

As the wool of the *Eriodendron* (*Erion*—wool *Dendron*—tree, Greek) is explained to have been spun into yarn and made into articles which have been submitted to the Colonial Museum at Haarlem and is further described as being used for tinder, I immediately concluded that our Biliburaga was not the tree referred to and consequently directed my inquiries to the eastward with the result that I found a tree known as the *Dudi Mara* (Canarese, the *Tinder* tree) (Yellam panji, Tamil), in Hassan. This tree is propagated both from seed and trunk cuttings and is used in the supari gardens for growing the *betel-leaf creeper* upon.

The silky wool of this tree is certainly very superior to the produce of any of the buragas and hitherto has, I regret to say, quite escaped my observation.

The sample herewith sent, together with one of the pods, will suffice for indentification.

Should this tree be the kapok, the knowledge that the produce is a marketable commodity will go far to at once induce owners to carefully collect it.

I should imagine that all well-drained good soils would be suitable for the growth of the dudi tree and all jungle lands would answer admirably.

The tree is however not one that would stand wind and being deciduous would not do for shade for coffee. I am doubtful as to whether the crop would be one which could be remuneratively gathered in the wet climate of the Malnad as it appears to mature in June or just at the beginning of the South-West mousoon.

The experiment is however well worthy of trial on a small scale on abandoned clearings and jungle scrub land.

In a strictly agricultural Province like Mysore, an immense amount of good can be done by the introduction of new products and I most sincerely hope that the skilled services of the Superintendent of the Government Gardens may be utilized in that direction precisely in the same manner as in the Crown Colony of Ceylon and elsewhere.

The matter of exchange and introduction of seeds with Foreign Countries is an impossibility with private individuals, and the single fact that the dudimara has hitherto been almost wholly neglected is a good example of the immense benefits which the talented Superintendent of the Government Gardens could confer on the agriculturist if the requisite facilities and funds were placed at his disposal.

Judging from these reports, the tree is most abundant in certain Taluks of the Tumkur, Mysore, Shimoga and Hassan Districts, and in the forests of Shimoga and Hassan. The reports of Messrs. Lovery and Graham Anderson are of special interest and these gentlemen deserve credit for the amount of information given.

In cultivation, the tree is extensively used as a support to the betel-vine, a purpose for which its rapid growth and naked under-stems render it well suited. It attains its largest size in moist ground, and Mr. Dickinson, the Conservator of Forests in Coorg, is of opinion, that the moister climate of South Canara is better adapted to its requirements than any part of Mysore.

The tree can be readily propagated from pole or stake-cuttings, which is an important matter in facilitating the quicker development of fruit bearing plants.

Kapok is ready for harvesting in the beginning of summer or in the months of February and March.

When separated from the fruit and cleaned, the total amount of kapok received from the Districts did not exceed 30lbs, from which quantity an assortment of 22lbs was well cleaned and equally divided for despatch to the Valuators at London and Rotterdam. The reports now submitted from the latter (Messrs. Collyer & Co., and J. C. Klutgen) are favorable as regards the quality and condition of the samples submitted for valuation, but the prices offered are so low that, I doubt the expediency of taking any further steps to advance this industry.

Where kapok is plentiful in the forests it might pay to collect and export it, but certainly not in any limited area of cultivation. The London market does not require kapok, but they are anxious to obtain a few similar materials at low prices. The sample received from Messrs. Collyer & Co., is the seed-cotton of *Calatropis gigantea* (Canarese ಎಕ್ಕೆಗಿಡ) a plant which is most common, nearly all over the plains of India.

From Collyer & Co., Brokers, London, dated 6th February 1885.

We have received one case of *Sennil Cotton* per *S. S. "Khedive"* through Messrs. Arbuthnot and Co., Madras.

There is but little demand for this material for home consumption, but large trade is done in it between Holland and the Dutch East Indies, the quality of the latter being preferred owing to its greater length and lightness. Your sample is rather short, fairly but not quite well cleaned, nominal value about 50s. per cwt, and would sell for export in considerable quantities.

For home use a somewhat similar material is wanted, small sample enclosed, we should be glad to receive samples of what you can offer, and lowest price you can supply specified quantities at freight paid to London, the extent of the demand will depend upon the quantity obtainable at low prices, say 5d to 6d per lb. nett weight. Please state clearly what quantity you can sell and in what months it could be sent forward and total quantity available if collection is worth attention.

From Collyer & Co., Brokers, London, dated 13th February 1885.

We confirm our report of 6th instant. It is uncertain how far a material reduction in price will stimulate consumption, the stock in Holland is large, say 2 to 3,000 cwts or more, the average price for good clean quality is there 70 to 90 per cwt, the value put upon your sample in Amsterdam was 47 to 55 per cwt. Our manufacturers of Down Quilts, &c., will not admit kapok into their factories, preferring to maintain there high standard of quality by using actual Feather Down. Probably new uses may be found if the material becomes plentiful and cheap. As indicated in our last, a demand is arising for long stapled varieties. We sent one sample last week, we enclose another even more wanted which appears to be "Sennil," this would sell freely at 5d to 6d per lb. for a special purpose.

Any further samples you can send us shall have our best attention not only of "Sennil" but of any new variety of fibre or other products.

Kapok or "Sennil" seed sells slowly at about £5 per ton, probably at £4—10—0. Landed in London it would go freely.

From J. C. Klutgen Rotterdam, dated 24th February 1885.

I feel much obliged for the pains you took in addressing me, the case containing kapok from your forests, and which you announced me by your favor of 20th January 1885.

I received that case in most perfect order, and I am pleased to declare that, this quality of kapok is not inferior to that from Java.

Perhaps it might interest you to hear that kapok cleaned in this manner, now is paid 5d, per ½ Kilo or 4½d. per English lb. (English currency sterling) free in the harbour of Rotterdam.

Mysore Government Press, Bangalore.—1885.